300 Area Process Trenches Rev. 5, 07/01/2002, 1 of 8

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FORM 3	DANGEROL	JS WASTE PERMIT APPI	ICATION	I. EPA/State I.D. No.						
	DANGERO	O WASTE I EKIMIT ALT		W   A   7   8   9   0   0   0   8   9   6   7						
	IAL USE ONLY									
Application	Date Received		Comments							
Approved	(month/ day / year)									
		App	roved 08/26/0	2						
II. FIRST O	R REVISED APPLICATION	1								
Place an "X	" in the appropriate box in A o	r B below (mark one box only) to i	ndicate whether this is the	ne first application you are submitting for						
your facility	or a revised application. If the	is is your first application and you	already know your facili	ty's EPA/STATE I.D. Number, or If this is						
		EPA/STATE I.D. Number in Section	on I above.							
A. First A	<b>pplication</b> (place an "X" below	v and provide the appropriate date)								
□ 1.	Existing Facility (See instru		2. New Facility (	Complete item below.)						
	definition of "existing" facili	•	MO	DAY TOTAL CONT.						
03	DAY   YEAR     1943	*For existing facilities, provide the date (mo/day/yr) operation began or the date construction commenced	1	DAY YEAR For new facilities, provide the date (mo/day/yr) operation began or is expected to begin						
		(use the boxes to the left		began of is expected to begin						
		tion of the Hanford Facility commenced								
B. Revised	<b>d Application</b> (Place an "X" be	elow and complete Section I above)								
$\boxtimes$	1. Facility has an Interim Sta	atus Permit	2. Facility has a	Final Permit						
III. PROCES	SSES - CODES AND DESIG	N CAPACITIES								
A. Process	Code – Enter the code from the list	of process codes below that best descri	ibes each process to be used	at the facility. Ten lines are provided for entering						
codes. It	f more lines are needed, enter the c	odes(s) in the space provided. If a proc	ess will be used that is not	included in the list of codes below, then describe the						
_		e space provided on the (Section III-C)								
B. Process I	Design Capacity – For each code e	entered in column A enter the capacity of	of the process.							
1. Amo	ount – Enter the amount.									
	t of Measure – For each amount en y the units of measure that are liste		om the list of unit measure of	codes below that describes the unit of measure used.						
	PROCESS	S	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR						
STORAGE:				PROCESS DESIGN CAPACITY						
	(barrel, drum, etc.)		S01	Gallons or liters						
Tank	(carrel, aram, etc.)		S02	Gallons or liters						
Waste pile			S03	Cubic yards or cubic meters						
Surface im	poundment		S04 S06	Gallons or liters						
DISPOSAL:			200	Cubic yards or cubic meters*						
Injection w	zell		D80	Gallons or liters						
Landfill	ven		D81	Acre-feet (the volume that would cover one acre						
				to a Depth of one foot) or hectare-meter						
Land appli			D82	Acres or hectares						
Ocean disp	posal poundment		D83	Gallons per day or liters per day						
	1		D84	Gallons or liters						
TREATMENT	Γ:									
Tank			T01	Gallons per day or liters per day						
	poundment		T02	Gallons per day or liters per day						
Incinerator			Т03	Tons per hour or metric tons per hour; gallons per hour or liters per hour						
Other (use	for physical, chemical, thermal or	biological treatment	T04	Gallons per day or liters per day						
processes r	not occurring in tanks, surface imposs. Describe the processes in the sp	oundments or		. , , ,						
Unit of Meas		_	of Measure Code	Unit of Measure Unit of Measure Code						
Gallons		G Liters Per Day	V	Acre-Feet A						
Liters		•		Hectare-MeterF						
		Y Metric Tons Per Hour	W	AcresB						
				Hectares Q						
Gallons Per D	Day	U Liters Per Hour	H							

ECY 030-31 Form 3 (Rev. 7/97)
\*Add per request of Washington State Department of Ecology (01/2001)

#### III. PROCESS – CODES AND DESIGN CAPACITIES (continued)

**Example for Completing Section III** (shown in line numbers X-1 and X-2 below): A facility has two storage tanks; one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

Line A. Process Code No. (from list above)				B. Process Design Capa							
				1. Amount (Specify) 2. Unit of Measure (enter code)				For Official Use Only			
X-1	S 0 2		2	600		G					
X-2	T	0	3	20		Ε					
1	D	8	4	11,356,200		V					
2											
3											
4											
5											
6											
7											
8											
9											
10											

## C. Space for additional process codes or for describing other process (code "T04"). For each process entered here include design capacity.

#### D84

The 300 Area Process Trenches received nonregulated process cooling water from operations in the 300 Area of the Hanford Site. The process trenches also received dangerous waste from several research and development laboratories and from the fuels fabrication process. The waste was discharged to the 300 Area Process Trenches and allowed to percolate into the soil column underlying the trenches. The annual quantity of waste identified under item IV.B. reflects the total flow to the process trenches in 1 year, and not a volume of dangerous waste discharged to the unit. This estimate was made because accurate records are unavailable regarding dangerous waste volumes discharged to the trenches. The process trenches were designed to percolate up to 11,356,200 liters (3,000,000 gallons) per day of wastewater. The 300 Area Process Trenches no longer receive dangerous waste and will be closed under interim status. The process design capacity reflects the maximum volume of water that was discharged daily, rather than the physical capacity of the unit. Closure activities have been completed and postclosure groundwater monitoring is being conducted.

#### IV. DESCRIPTION OF DANGEROUS WASTES

- A. Dangerous Waste Number Enter the digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four-digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.
- **B.** Estimated Annual Quantity For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. Unit of Measure For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate odes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
Pounds	P	Kilograms	K
Tons	T	Metric Tons	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

#### D. Processes

#### 1. Process Codes:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. Process Description: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER - Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

- 1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- 2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.
- 3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

Example for completing Section IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste.

<b>+</b>													
	Line A. Dangerous Waste No.		C		B. Estimated Annual	C. Unit of Measure (enter code)		D. Processes					
No.	No. (enter code)				Quantity of Waste			)	1. Process Codes (enter)				2. Process Description (if a code is not entered in D(1))
X-1	K	0	5	4	900		P		T03	D80			
X-2	D	0	0	2	400		P		T03	D80			
X-3	D	0	0	1	100		P		T03	D80			
X-4	D	0	0	2					T03	D80			Included with above

Photocopy this page before completing if you have more than 26 wastes to list.

.D. Numb	er (enter from page	1)	
W A 7	8 9 0 0 0		6 7
	<u> </u>		

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

IV. D	ESCR	IPTIO	N OF	DANG	EROUS WASTES (continue	(d)								
Line	Line A. Dangerous Waste No.			o No	B. Estimated Annual	C. Unit of Measure			D. Processes					
No.	A. Da	(enter	code)	e ivo.	Quantity of Waste		nter cod		1. Process Codes (enter)			2. Process Description (if a code is not entered in D(1))		
1	D	0	0	2	453,592,370		K		D84				Percolation	
2	D	0	0	7			K		D84				Percolation	
3	F	0	0	1			K		D84				Percolation	
4	F	0	0	2			K		D84				Percolation	
5	F	0	0	3			K		D84				Percolation	
6	F	0	0	5			K		D84				Percolation	
7	U	2	1	0			K		D84				Percolation	
8	W	Т	0	2			K		D84				Percolation	
9														
10														
11														
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IV. DESCRIPTION OF DANGEROUS WASTE (continued)										
E. Use this space to list additional process codes	from Section D(1) on page	e 3.								
The 300 Area Process Trenches receive laboratories in the 300 Area and from the dangerous waste (WT02), discarded che halogenated solvents (F001, F002, and I unavailable concerning the amount of da of waste (item IV.B.) reflects the total quato the unit in one year.	e fuels fabrication proc emical product (U210), F003), and spent nonh angerous waste discha	ess. This waste of corrosive waste (language) alogenated solver rged to the trench	consisted D002), c nt (F005) es. The	of stat hromiui . Accu estima	e-only toxic, m (D007), spent rate records are ted annual quantity					
· ·										
•										
V. FACILIITY DRAWING Refer to attached dra	wing(s).									
All existing facilities must include in the space	e provided on page 5 a scale	drawing of the facili	ty (see ins	ructions	for more detail).					
VI. PHOTOGRAPHS Refer to attached photogra	ph(s).									
All existing facilities must include photograph and disposal areas; and sites of future storage,					s; existing storage, treatmen					
VII. FACILITY GEOGRAPHIC LOCATION	This info	rmation is provided or	the attach	ed draw	ings and photos.					
LATITUDE (degrees, minutes, &	seconds)	LONGIT	UDE (deg	rees, mir	nutes, & seconds)					
VIII. FACILITY OWNER				,						
<ul> <li>A. If the facility owner is also the facility oper left and skip to Section IX below.</li> <li>B. If the facility owner is not the facility oper</li> </ul>		•		•						
1 Name of Fa	ncility's Legal Owner			2 Pho	ne Number (area code & no.					
1. Ivaine of Fa	ichity s Legar Owner	-		2. 1110	ne ramoer (area code & no.					
					· · · · · · · · · · · · · · · · · · ·					
3. Street or P.O. Box	4. Cit	y or Town	5. St.		6. Zip Code					
IX. OWNER CERTIFICATION  I certify under penalty of law that I have personally exan on my inquiry of those individuals immediately responsif I am aware that there are significant penalties for submit	ble for obtaining the information	on, I believe that the subt	nitted infori	nation is t	d documents, and that based true, accurate, and complete.					
We also have been been as a second of the se	Signature 1	//	una imprise		Date Signed					
Keith A. Klein, Manager	1/1/1/	///,			-					
U.S. Department of Energy		Ш—			1/1/02					
Richland Operations Office	1000190				11102					
X. OPERATOR CERTIFICATION  I certify under penalty of law that I have personally exam	nined and am familiar with the	information submitted is	this and a	l attached	I documents and that haved					
on my inquiry of those individuals immediately responsib I am aware that there are significant penalties for submi	ble for obtaining the informatio	on, I believe that the subr	nitted infori	nation is t						
Name (Print Or Type)	Signature				Date Signed					
See attachment			· · · · · · · · · · · · · · · · · · ·							

### X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner/Operator

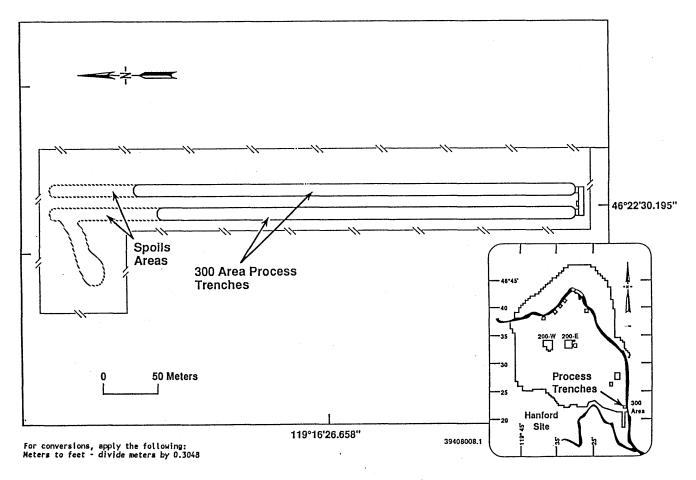
Keith A. Klein, Manager U.S. Department of Energy Richland Operations Office Date

E. Keith Thomson

President and Chief Executive Officer

Fluor Hanford

## **300 AREA PROCESS TRENCHES SITE PLAN**



39408008.1

# **300 AREA PROCESS TRENCHES**



46°22'30.195" 119°16'26.658"

E0203055\_1.JPG (PHOTO TAKEN 2002)